## Risks of Phorate Use to Federally Threatened California Red-legged Frog

(Rana aurora draytonii)

## to Federally Threatened Valley Elderberry Longhorn Beetle

(Desmocerus californicus dimorphus)

## to Federally Threatened Bay Checkerspot Butterfly

(Euphydryas editha bayensis)

## to Federally Endangered San Joaquin Kit Fox

(Vulpes macrotis mutica)

**Pesticide Effects Determinations** 

Environmental Fate and Effects Division Office of Pesticide Programs Washington, D.C. 20460

**October 10, 2008** 

Phorate is registered for use in CA on: beans, corn, sweet corn, cotton, peanut, potato, sorghum, sugarbeet, wheat, and ornamentals. Total phorate use in CA is listed by county in **Table 6**. **Table 7** shows the phorate usage data (CDPR PUR, 2002-2005) compiled by Site Name (type of crop or non-crop).

Analysis of labeled use information is the critical first step in evaluating the federal action. The current label for phorate represents the FIFRA regulatory action; therefore, labeled use and application rates specified on the label form the basis of this assessment. The assessment of use information is critical to the development of the action area and selection of appropriate modeling scenarios and inputs. Table 5 shows phorate label information for California. Subsequent label updates (since May 2008) are not included in this Table; this information was received after the official label information was obtained (March 2008) and could not be fully integrated into this document. Nevertheless, exposure estimates and risks were evaluated exclusively for the more current labels as well (requiring soil-incorporation for all uses). Each crop/non-crop item (Use Site) is assessed in this document; any possible indoor uses are not considered here. All listed application rates pertain to a single crop cycle. Although there may be more than one crop cycle per year in CA for some of these uses, only a single cycle was evaluated. However, the application dates selected for these single cycles were within the annual time frame during which exposures were expected to be highest (so that a relatively protective estimate is given) but consistent with real application dates for these uses. Additional estimates conducted at other times of year resulted in lower exposure values, and would not significantly affect the results of this assessment if added to exposure estimates already presented in this document.

Table 5 Phorate Use Sites and Corresponding Application Rates and Methods

Use Site	Application Equipment Application Type Application Timing	Max. Single Appl. Rate	Registration label	Comments
Ornamental	Soil incorporation equipment.			
herbaceous	Soil in-furrow treatment	8 lb ai/A	CA87006900	CA label
plants	At planting			
	Soil incorporation equipment Soil drill treatment At planting	2.04 lb ai/ A		
	Soil incorporation equipment Soil band treatment At planting	1.52 lb ai/A		
Beans  Soil incorporation of Soil incorporation To At planting  Granule applicator e	Soil incorporation equipment Soil incorporation Treatment At planting	0.1125 lb ai/1K linear ft	002749-00521, 005481-00526, 005481-00527,	
	Granule applicator equipment Soil sidedress treatment At planting	0.1175 lb ai/1K linear ft	005481-00530, 009779-00293, 034704-00259	
	Granule applicator Soil drill treatment At planting	2.04 lb ai/A		
	Granule applicator Soil band treatment At planting	1.52 lb ai/A		
Corn	Soil incorporation equipment	1.3 lb ai/A	002749-00521, 005481-00526, 005481-00527,	
	Soil band or soil incorporated	1	003461-00327,	

treatment